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(11) Publication number : 0 688 540 A1

(12)

## EUROPEAN PATENT APPLICATION

(21) Application number : 95810408.5

(51) Int. Cl.<sup>6</sup> : A61C 5/12

(22) Date of filing : 19.06.95

(30) Priority : 21.06.94 CH 1955/94

(43) Date of publication of application :  
27.12.95 Bulletin 95/52

(84) Designated Contracting States :  
CH DE ES FR GB IT LI SE

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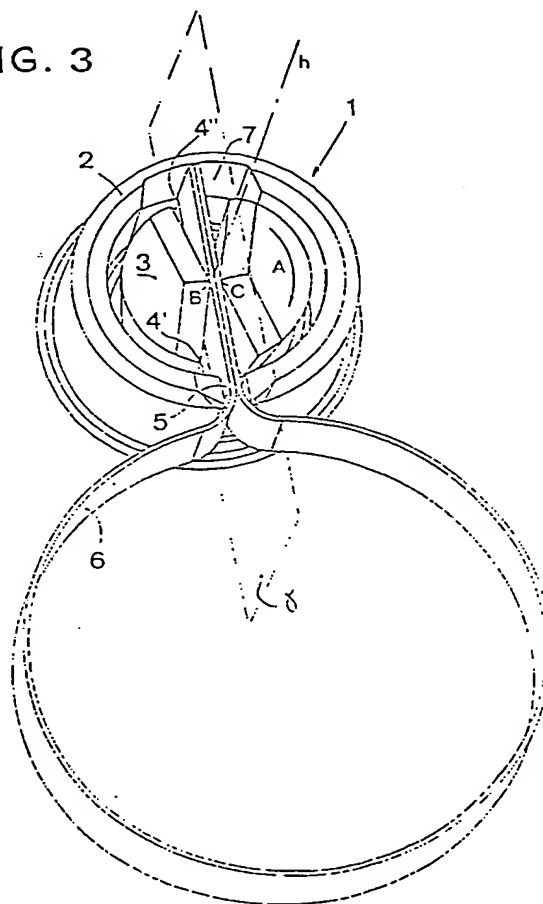
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(54) Tension gripper for odontological use

(57) In a tensioning gripper (1) with ring (2) and coaxially arranged rotary pin (3), both being provided with a slot (5, 4) suitable for receiving the matrix (6) to be tensioned, the slot (4) of the rotary pin (3) has a symmetry plane ( $\gamma$ ) parallel to the longitudinal axis (h) of the rotary pin (3). The sides of the slot are composed by two angled portions (4', 4''), said sides being arranged mirror-like on both sides of said symmetry plane ( $\gamma$ ) and both portions (4', 4'') are converging towards said longitudinal axis (h) of said rotary pin (3), the two vertices (B, C) of the portions (4', 4'') being opposite and adjacent one to the other.

Such a slot allows an easy introduction and gripping of the matrix until, by rotating the pin, the matrix is held and tensioned.

FIG. 3



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of ring 2 is provided with a plurality of peripherally arranged protrusions 8i (Figure 2). These protrusions are plastically deformable to a prefixed extent when, between them, the rotary pin 3 having an outer diameter which is slightly greater than the diameter of the externally tangent circumference of said protrusions 8i is introduced. As a consequence of that, said protrusions 8i are slightly deformed by compression and act as support means for the rotary pin 3.

As already briefly mentioned, it is evident that one skilled of the art can envisage other embodiments which are different from those disclosed and represented up to here.

### Claims

1. Tensioning gripper for a matrix tensioning apparatus for odontological use, comprising a ring (2) and a rotary pin (3) coaxially arranged inside said ring, with both said pin and said ring being provided with at least one slot (4, 5) suitable for receiving the ends of the matrix (6) to be tensioned, characterized in that the slot (4) through the rotary pin (3) has a symmetry plane ( $\gamma$ ) parallel to the longitudinal axis (h) of said rotary pin (3), whereas each side of the slot (4) is composed of two angled portions (4', 4''), said sides being arranged mirror-like on both sides of said symmetry plane ( $\gamma$ ) and both portions (4', 4'') converging towards said longitudinal axis (h) of said rotary pin (3), the vertices (B, C) of the portions (4', 4'') being opposite and adjacent one to the other.
2. Tensioning gripper according to claim 1, in which the corresponding convergent portions (4' ; resp. 4'') of the sides of said slot (4) form, between them, an angle ( $\alpha$ ) of approximately 30° (Fig. 4).
3. Tensioning gripper (1) according to claim 1 or 2, characterized in that said ring (2) is provided, on its inner surface facing said rotary pin (3) and in a diametrically opposite position to the position of a slot (5) provided in the ring, with a groove (7) at least extending throughout the height of that portion of ring (2) which is frontally opposite to one of said portions (4', 4'') which constitute said slot (4) of the rotary pin (3).
4. Tensioning gripper (1) according to any of claims 1 to 3, characterized in that the inner surface of the ring (2) to be coupled with the rotary pin (3) is peripherally provided with a plurality of protrusions (8i) which are plastically deformable to a prefixed extent when said rotary pin (3) is introduced between them.

FIG. 3

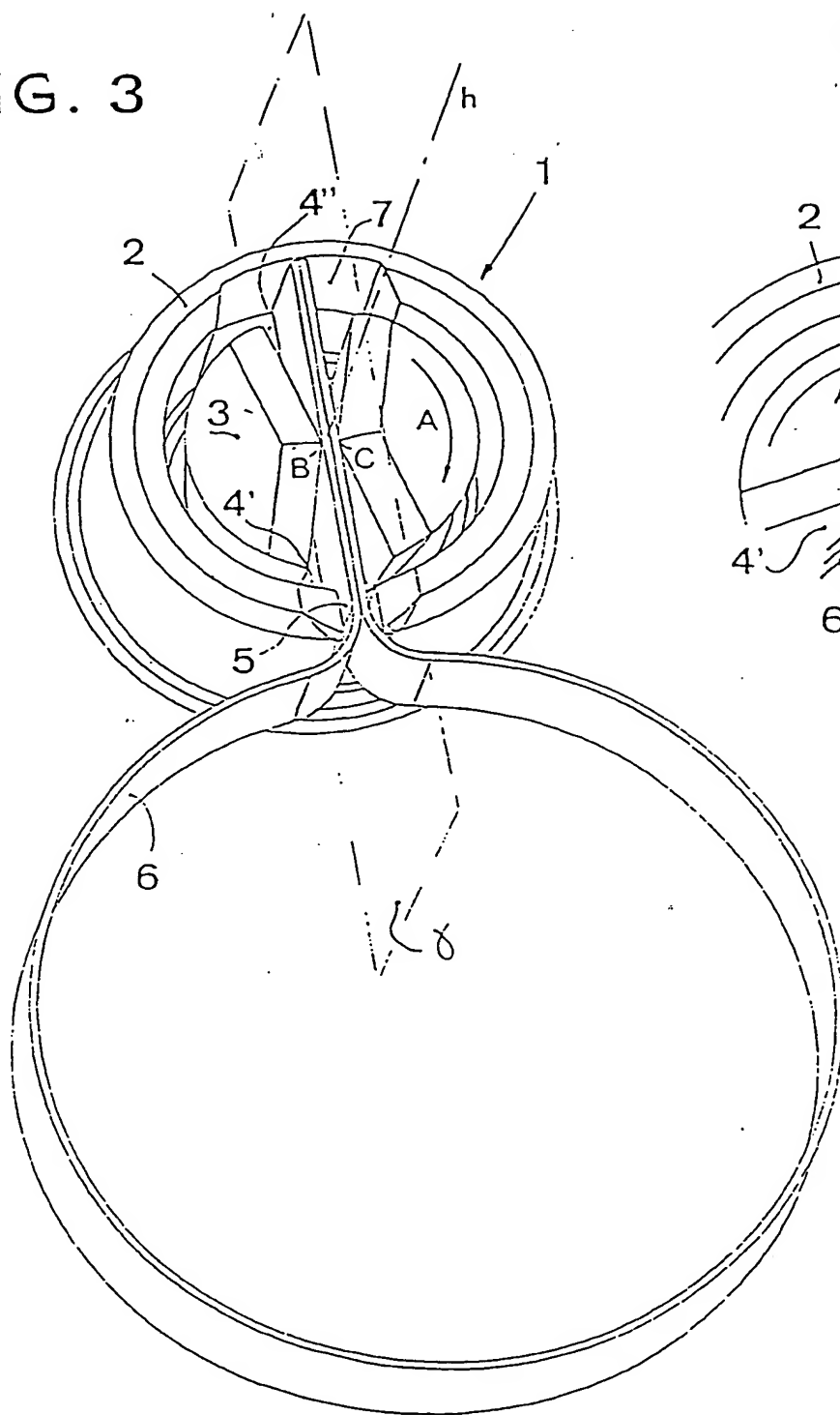


FIG. 4

